AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 2, lines 6 to 14 with the following rewritten paragraph:

In order to generate a selective ALK substrate, peptides reproducing the sequence of ALK activation loop (aa 1274-1294 (SEQ ID NO: 2): ALK_HUMAN, Q9UM73(SEQ ID NO: 5), swiss-PROT) were synthesized and tested. The peptides ARDIYRASFFRKGGCAMLPVK (SEQ ID N. 1) and ARDIYRASYYRKGGCAMLPVK (SEQ ID N.2) were particularly effective as ALK substrates showing a phosphorylation degree higher than that of polyGlu/Tyr, a random polymer which is known to be a good substrate for most tyrosine kinases. The first object of the invention is therefore a peptide having an amino acid sequence selected from SEQ ID N. 1 and SEQ ID N. 2.

Please replace the paragraph on page 2, line 21, to page 3, line 1, with the following rewritten paragraph:

As used herein, "ALK functional derivative" means any modified form of ALK protein, for example a truncated or conjugated form or a fragment thereof, which maintains the catalytic activity of unmodified ALK. The functional derivative should preferably contain the entire catalytic domain of ALK spanning residues 1116-1392 of ALK sequence (Q9UM73) (SEQ ID NO: 5). The portion of ALK protein stretching from residue Leu^{1073} to

Ala^{1459} is preferably used. When produced by recombinant gene technology using the baculovirus-based expression system, this ALK fragment shows a correct folding (confirmed by CD spectra) and an effective catalytic activity.

Please replace the paragraph on page 7, line 16, with the following rewritten paragraph:

Figure 2: kinetics for ALK kinase with peptides (SEQ ID NOS 1-4, respectively in order of appearance)

Please replace Tables I and II on pages 11 and 12, and replace them with the following tables:

TABLE I
Kinetic constants for rALK with synthetic peptides.

PEPTIDE	V_{max} (pmol/min)	K_m (μM)	Efficiency (V_{max}/K_m)
ARDIYRASYYRKGGCAMLPVK (SEQ ID NO: 2)	99.5	90.5	1.1
ARDIYRASFFRKGGCAMLPVK (SEQ ID NO: 1)	186.3	109.4	1.7

TABLE II
Phosphorylation rates of model substrates by ALK catalytic domain.

Poly(Glu/Tyr) and peptide concentrations were 0.1 mg/ml and 400 μM, respectively. Enzyme concentration was 10 units. Reported values represent the means for three separate experiments. S.E.M. values were always less than 14%.

SUBSTRATE	Phosphorylation degree (pmol/min)
Poly(Glu/Tyr)	10.0
ARDIYRASFFRKGGCAMLPVK (SEQ ID NO: 1)	30.3

In the Sequence Listing:

Please replace the Sequence Listing of record with the attached substitute Sequence listing (in paper and computer readable form (CRF)).